


FISHWAY STATUS REPORT

Date: 9/8/2018
Inspection Period: 9/2/2018 thru 9/8/2018



**US Army Corps
of Engineers**
Portland District

JOHN DAY DAM

JD/WC Project-Fisheries
P.O. Box 823
Rufus, Oregon 97050
Phone: 541-506-7860

All JD Fishways are inspected twice per day during fish passage season, Mar. 1 - Nov. 30.
Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections: 14	Temperature: 68 F
	Out of Criteria	Limit		Secchi: 6.0 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total available.	
Exit differential	0	≤ 0.5'		
Exit Control weirs	0	High setting	High setting is normal for JDN	
Count station differential	0	≤ 0.3'		
Weir crest depth (DS gauge)	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'	AVG 1.5	
SOUTH FISHWAY	0		In service with two AWS turbines and two FOGs.	
Exit differential	0	≤ 0.5'		
Exit Control weirs	0	Mid setting	Mid setting is normal for JDS	
Count station differential	0	≤ 0.3'		
Weir crest depth (US gauge)	0	1.0' ± 0.1'		
South entrance differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.5	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.17	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.9	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.9	
JUVENILE PASSAGE	0		In service since 2/28.	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Monthly STS inspection was completed 8/21. All STSs found in good working order.	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashrack raking completed on 8/29. Very little debris raked/ recovered.	
Vert barrier screen drawdown	0	<1.5', wkly	Trashrack and VBS differentials are below the criterion of 1.5'.	
Spill volume	0	per FPP	Spill Season ended on 8/31. Bay 2 open at 1.6K for adult attraction to North Entrance on 9/1.	
Spill pattern	0	per FPP	Bay 2 open at 1.6K during daylight hours for adult attraction to North Entrance since 9/1.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation:

SMF returned to regular, every other day, 24 hrs sampling on 9/1 after the river temperature dropped down below 69.5 F on 8/31.

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18.

Research: None

Fallbacks: AVG: 0 MAX: 0 MIN: 0

Birds :

White pelican #s declined significantly since the end of spill season on 9/1. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies.

Operations:

JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 (\$ 3 million each.)

JD North Ladder in service since 12/21/17. 6 out of 6 AWS pumps available again since 4/18/18.

MU Gatewell Drawdowns: All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

Maintenance:

JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?)

Calibration: All gauges/ sensors are within the criteria of 0.3' .

Research:

JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

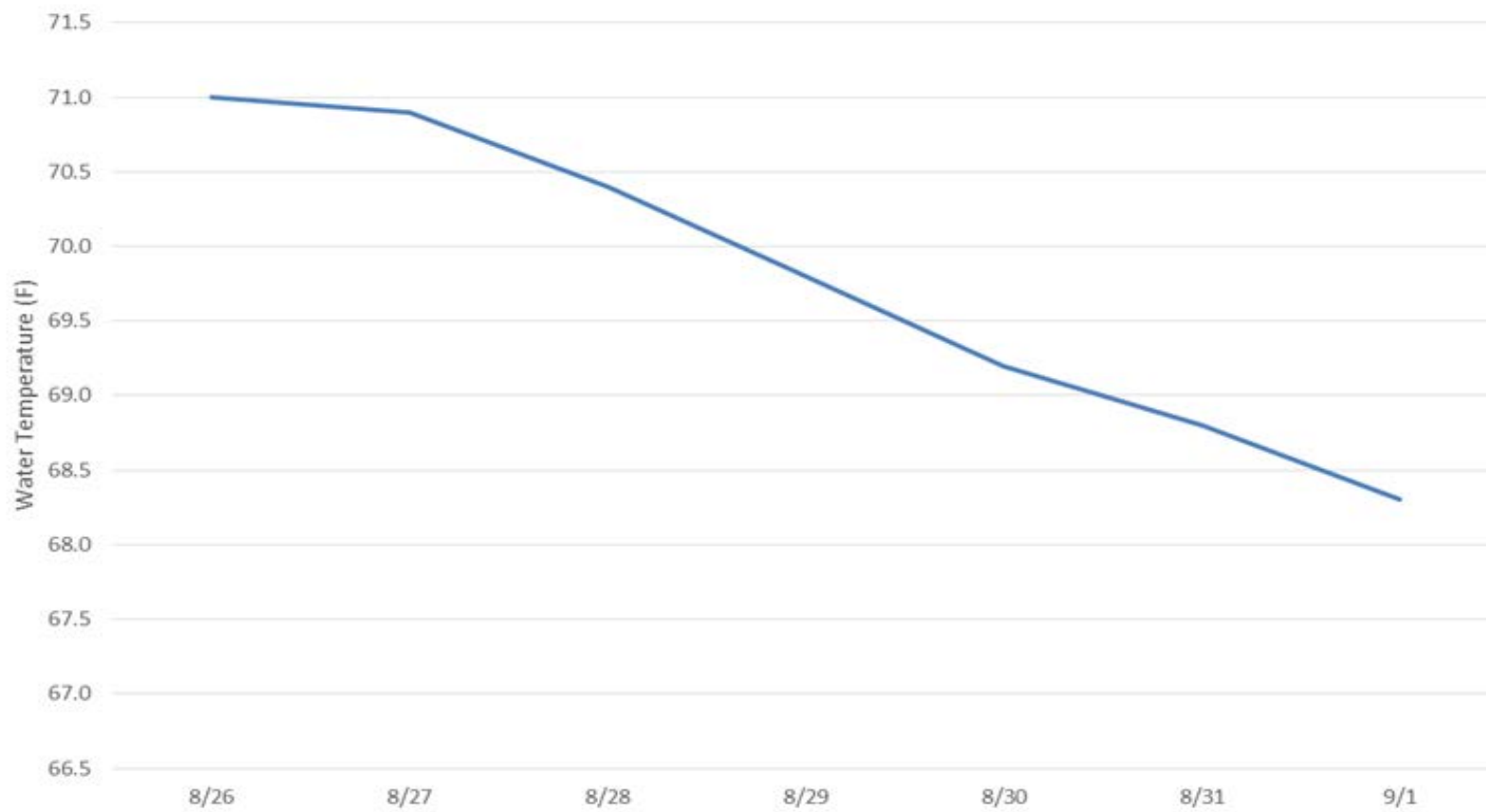
Lamprey trapping at JD S Trap and JD N LPS by CRITFC/ Tribes completed on 8/22. Good season collection #s in spite of the lower lamprey passage in 2018.

WDFW NPM angling from JD PH Tailrace deck continues since 5/1. VERY Low # s in August, but still great total seasonal catch of 2,864 NPM thru 9/02.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

MOYNAHAN, KEVIN, PATRICK, 1393959157
E-Signed by MOYNAHAN, KEVIN, PATRICK, 1393959157
VERIFY authenticity with ApproveIt

Water Temperature (8/26/18 - 9/1/18)



JDA Collection Channel Velocity

Date 24-Aug-18

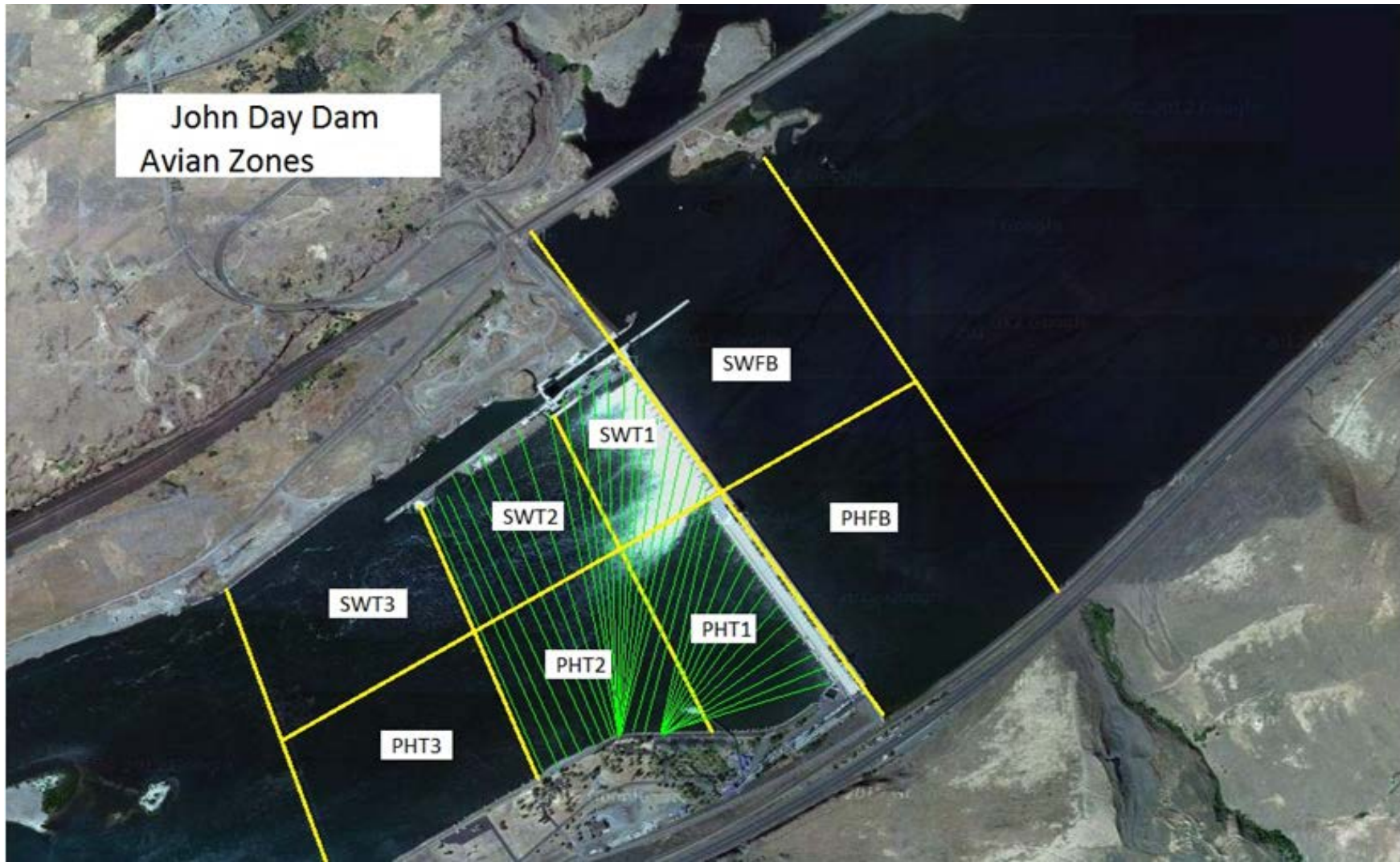
By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:19	79	2.28
2 - 4	2:33	153	2.43
4 - 6	3:56	236	2.17
6 - 8	5:19	319	2.17
8 - 10	6:35	395	2.37
10 - 12	7:48	468	2.47
12 - 14	9:12	552	2.14
14 - 16	10:24	624	2.50
16 - 18	11:22	682	3.10
			2.40

Bay 19 TW: 159.9
turbine 2-3=68rpm

FPP Criteria 1.5–4.0 feet per second (2 fps optimum)

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	68	6.0	37
Mon	68	6.0	bypass
Tue	68	6.0	46
Wed	69	6.0	bypass
Thur	69	6.0	55
Fri	68	6.0	bypass
Sat	68	6.0	70
AVG:	68	AVG: 6.0	AVG/Sample 52
			MAX 70
			MIN 37

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.7	8.7	1.4	8.5	1.4	4.6	1.7
Sun	8.7	8.7	1.2	8.3	1.5	4.6	1.1
Mon	8.2	8.2	1.4	8.0	1.5	4.6	1.8
Mon	9.4	9.5	1.2	8.8	1.4	4.6	1.3
Tues	9.3	9.3	1.4	8.9	1.6	4.5	1.5
Tues	9.4	9.4	1.5	9.0	1.4	4.6	1.8
Wed	8.7	8.7	1.5	8.0	1.7	4.6	1.8
Wed	9.4	9.4	1.3	9.0	1.6	4.6	1.7
Thur	8.9	8.9	1.4	8.5	1.6	4.6	1.7
Thur	8.8	8.9	1.5	8.3	1.6	4.6	1.6
Fri	8.8	8.8	1.6	8.5	1.4	4.6	1.5
Fri	8.6	8.6	1.3	8.5	1.4	4.6	1.7
Sat	8.7	8.7	1.4	8.4	1.4	4.7	1.7
Sat	8.4	8.4	1.5	8.0	1.5	4.6	1.6
AVG:	8.9	8.9	1.4	8.5	1.5	4.6	1.6

JDA Bird Counts: 9/2/18 to 9/8/18

NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
2-Sep	PHFB	0	0	33	43	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	81
2-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	27
2-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	PH3	18	0	22	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	41
2-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
2-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
2-Sep	SW3	16	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	19
Avg/Survey		17		49		0		3		0		0		20		0		0		0		176
3-Sep	PHFB	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
3-Sep	SWFB	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
3-Sep	PH1	5	1	0	0	0	1	0	0	0	0	0	0	12	0	0	0	0	0	0	0	19
3-Sep	PH2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
3-Sep	PH3	16	19	0	0	0	0	0	0	0	0	0	0	2	2	0	37	0	0	0	0	76
3-Sep	SW1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	SW3	4	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	6
Avg/Survey		27		30		1		0		0		0		9		19		1		0		171
4-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		0		0		0		0		0		0		0		0
5-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		0		0		0		0		0		0		0		0

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		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
6-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		0		0		0		0		0		0		0		0
7-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		0		0		0		0		0		0		0		0
8-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		0		0		0		0		0		0		0		0
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		87		158		2		5		0		0		57		37		1		0		347
Avg/Survey		6		11		0		0		0		0		4		3		0		0		25